

## HOW FORECASTS ARE MADE

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture, and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data, and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason forecasts are issued that reflect three future precipitation conditions - Below Normal, Average, and Above Normal. These forecasts are termed reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

## FOR MORE INFORMATION

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. Because of the limited space, snow survey measurements are not published in monthly reports. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

<u>STATE</u>	<u>ADDRESS</u>
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage AK 99504
Arizona	Room 3008, Federal Bldg., 230 North First Ave., Phoenix AZ 85025
Colorado (New Mexico)	2490 West 26th Ave., Denver CO 80211
Idaho	304 North 8th Street, Room 443, Boise ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman MT 59715
Nevada	50 South Virginia Street, Third Floor, Reno NV 89505
Oregon	1220 Southwest 3rd Ave., 16th Floor, Portland OR 97204
Utah	4418 Federal Bldg., 125 South State St., Salt Lake City UT 84147
Washington	360 U.S. Court House, Spokane WA 99201
Wyoming	Federal Bldg., Room 3124, 100 East 'B' St., Casper WY 82601

In addition to state reports, a Water Supply Outlook Report for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 514, Portland, OR 97209.

### Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include - Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia - The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory - Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1, Alberta, Saskatchewan, and N.W.T. - The Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta, T3C 1A6.

# **Wyoming Water Supply Outlook**

AND

FEDERAL - STATE - PRIVATE  
COOPERATIVE SNOW SURVEYS

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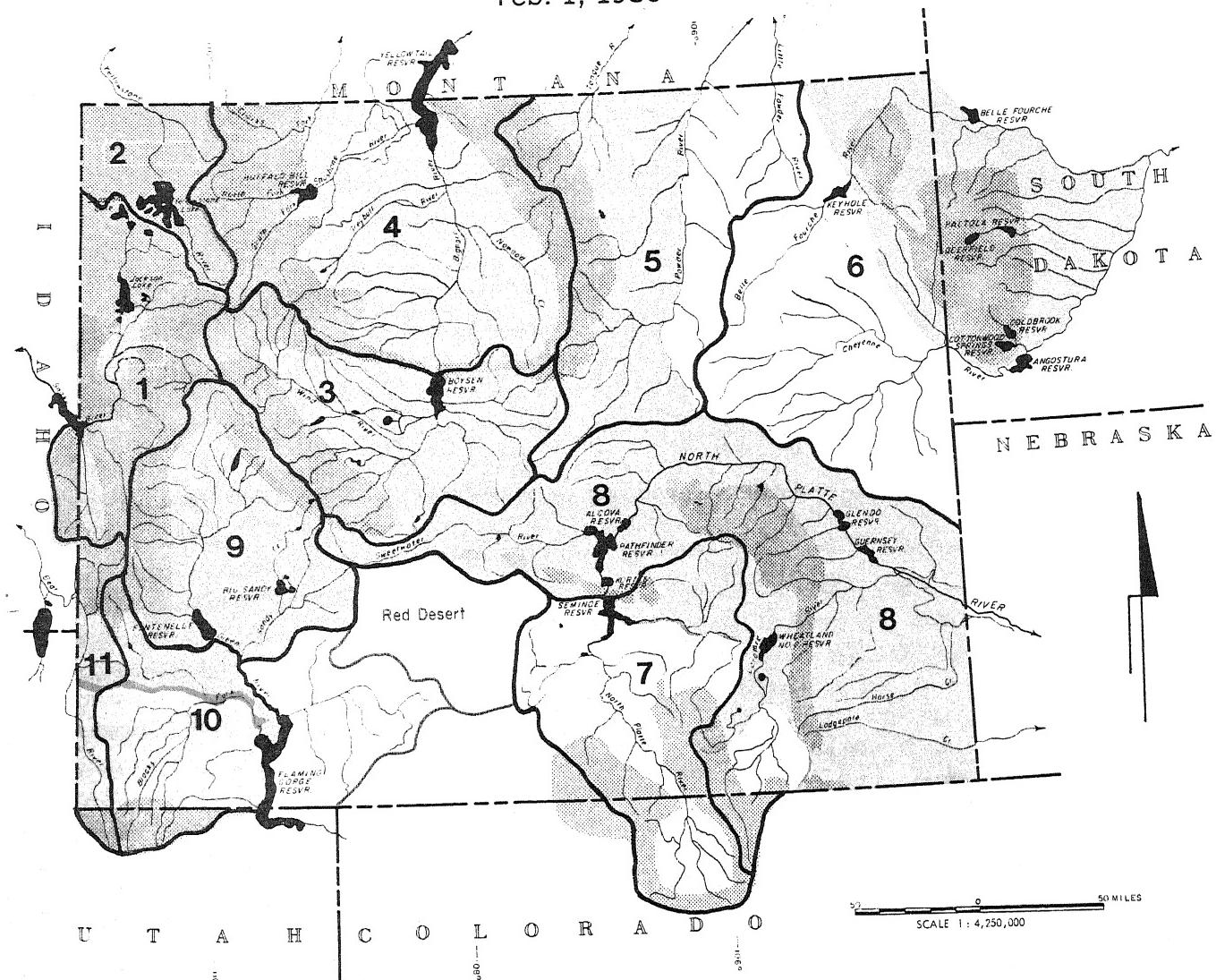
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# STREAMFLOW PROSPECTS FOR WYOMING

Spring and Summer Period

Feb. 1, 1985



## LEGEND

1. Snake River Basin
2. Upper Yellowstone and Madison River Basins
3. Wind River Basin
4. Bighorn River Basin
5. Powder and Tongue River Basins
6. Belle Fourche and Cheyenne River Basins
7. Upper North Platte and Little Snake River Basins
8. Lower North Platte, Sweetwater, and Laramie River Basins
9. Upper Green River Basin
10. Lower Green River Basin
11. Upper Bear River Basin

>130%	Much Above Average
110%-130%	Above Average
90%-110%	Near Average
70%-90%	Below Average
<70%	Much Below Average
	Not Forecast

## GENERAL OUTLOOK

WYOMING STREAMFLOWS ARE FORECAST AT NORMAL TO MOSTLY BELOW NORMAL FOR THIS COMING SPRING AND SUMMER. A NEAR RECORD DRY JANUARY HAS ALMOST HALTED SNOWPACK ACCUMULATIONS.

### SNOWPACK:

Monthly increases in snowpacks during January were clobbered by very cold and dry weather. Highest decrease in the snow compared to normal was measured in the Snake River Basin with the January 1st 36 percent above average figure slashed to 16 percent below average on February 1st (a 52 percent of average decrease). Similar decreases of 20 to 40 percent of average were noted over the rest of Wyoming. The lowest snowpack is in the Wind River drainage at 32 percent below average. Only the Bear River and the Blacks Fork drainages are above normal (16 percent and 12 percent respectively).

### PRECIPITATION:

January 1985 precipitation was much below normal in many areas. Eighty percent below normal amounts were received in the western and extreme northeastern sections--Yellowstone, Snake, Green, Bear, Powder, and Belle Fourche. However, the Big Horn and Platte drainages received 25 to 50 percent above normal precipitation in the lower elevations. The most precipitation received was along both slopes of the Big Horn mountains. Other areas ranged well below normal.

Seasonal comparisons show that the Yellowstone, Big Horn, and Wind River drainages were at least 50 percent below normal. Other areas were 25 percent below to near normal.

### RESERVOIR STORAGE:

Stored waters in Wyoming's reservoirs were 10 percent above usual on February 1. Very high base flows and high storage at the beginning of the season have been the case on the North Platte system. Seminoe Reservoir is currently storing 89 percent above normal with Pathfinder next at 65 percent above normal. Buffalo Bill has 36 percent above normal. Other reservoirs are near normal.

### STREAMFLOWS:

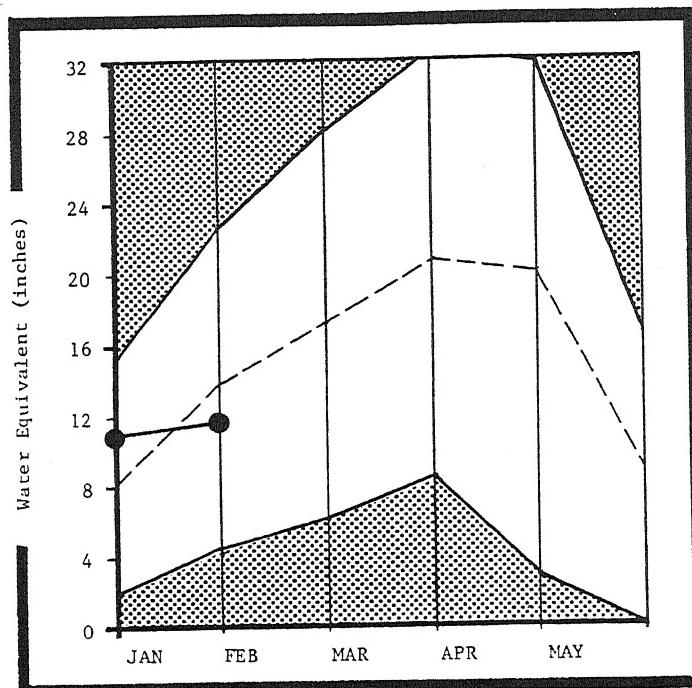
The January 1 outlook for normal water supplies this summer from streamflows was hit hard by the lack of January snowfall and excessive high winds depleting snow from some open watersheds. The Bear River remains highest at 28 percent above normal while the Snake River has dropped 35 points to 11 percent below normal. The rest of Wyoming streams are expected to flow at 5 to 20 percent below normal.

All of this is conditional upon normal snowpack accumulation during the remaining one-third of the snow season. Forecasts in this bulletin are a result of a coordinated activity between the Soil Conservation Service and the National Weather Service in an effort to provide the best possible service to the water user.



## SNAKE RIVER BASIN

MOUNTAIN SNOWPACK\*



\*Based on selected stations

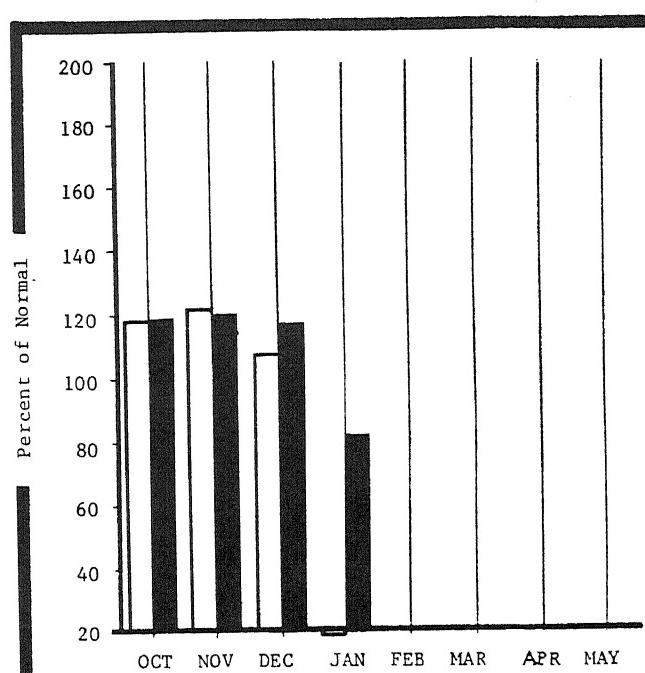
Maximum

Average

Minimum

Current

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation



Year to date precipitation

### WATER SUPPLY OUTLOOK:

An extremely cold and  
snowpack accumulatio  
of the average seaso  
Snowpack is now at 1  
are forecast at 8 tc  
storage is above nor

## SNAKE RIVER BASIN

### STREAMFLOW FORECASTS

STREAMFLOW FORECAST POINT	THIS YEAR		Streamflow Forecast	PAST RECORD	
	11,000 Ac-Ft.	Pct. Ave.		1,000 Acre-Feet	Last Yr.**
SNAKE RIVER near Moran (1)	830	94	April-Sept.	880	
SNAKE RIVER above Palisades near Alpine (1)	2,427	89	April-Sept.	2,730	
SNAKE RIVER at Heise, ID (2)	3,660	90	April-Sept.	4,066	
PACIFIC CREEK at Moran	140	81	April-Sept.	174	
GREYS RIVER above Palisades	322	82	April-Sept.	393	
SALT RIVER above Palisades near Etna	350	89	April-Sept.	394	
PALISADES RESERVOIR INFLOW (1)	3,387	89	April-Sept.	3,793	
SWIFT CREEK near Afton	43.0	92	May-Sept.	46	

(1) Observed flow plus change in storage in Jackson Lake.

(2) Observed flow plus change in storage in Jackson Lake and Palisades Reservoir.

\*\* Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

+ Period of average 1961-1980.

### SUMMARY of SNOW MEASUREMENTS

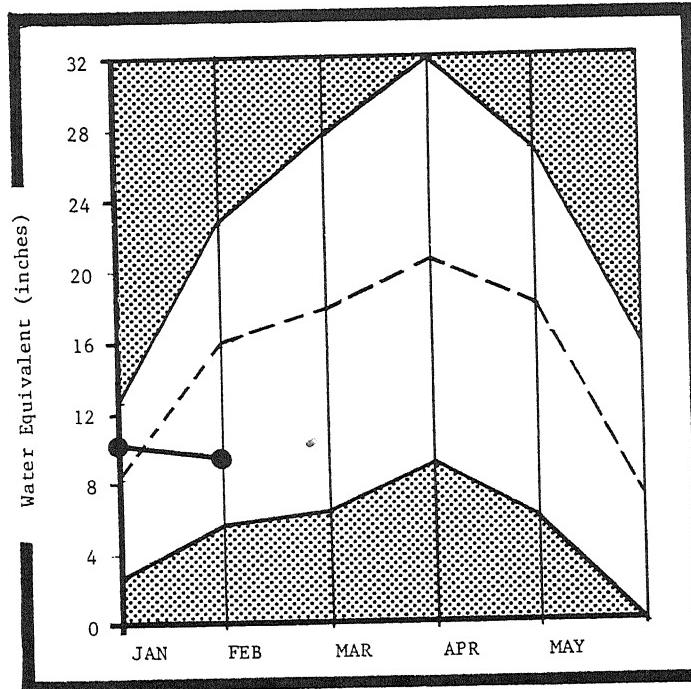
River Basin and/or Sub-Watershed	No.	This Yr.	Snow Snow/Water as Pct of Site	Last Yr/Average
Snake abv. Jackson Lake	8	111	94	
Pacific Creek	2	86	85	
Gros Ventre	3	84	76	
Hoback River	7	90	82	
Greys River	4	77	70	
Salt River	5	82	89	
Snake River above Palisades	29	92	84	

### RESERVOIR STORAGE (Thousand Ac. Ft.)

Reservoir	Usable Capacity	This Year	Last Year	Ave.
Grassy Lake	15.11	13.01	13.91	10.41
Jackson Lake	624.41	275.41	489.91	612.51
Palisades	1,200.01	929.31	966.41	907.81

## UPPER YELLOWSTONE AND MADISON RIVER BASINS

MOUNTAIN SNOWPACK\*



\*Based on selected stations

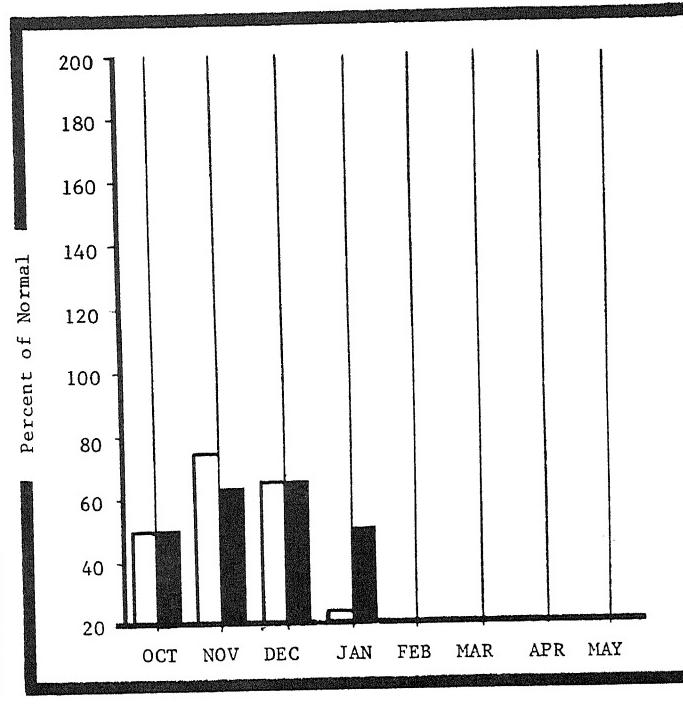
Maximum 

Average 

Minimum 

Current 

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Snowpacks are 18 percent and 9 percent respectively in these basins. 10 percent below normal. Average precipitation will be needed during the remaining months to produce average snowmelt.

## **YELLOWSTONE-MADISON RIVER BASIN**

## STREAMFLOW FORECASTS

xx Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

+ Period of average 1961-1980.

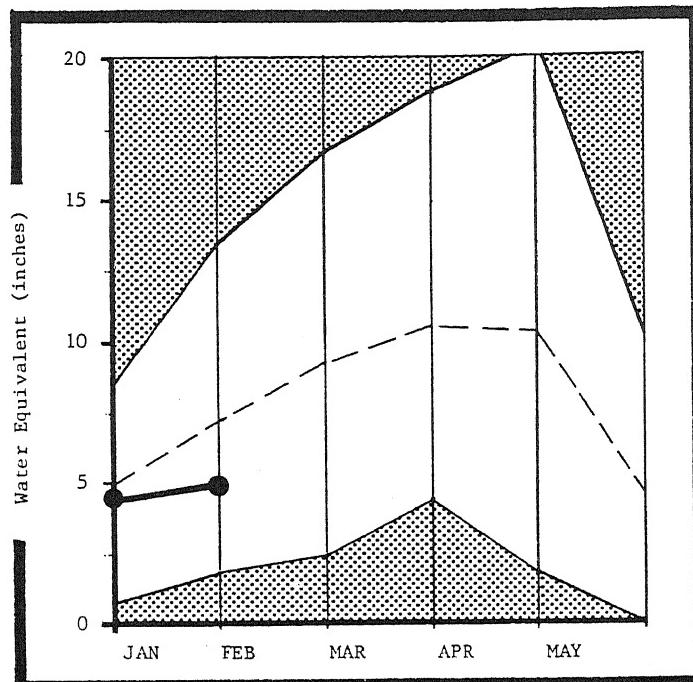
### SUMMARY OF SNOW MEASUREMENTS

RESERVOIR STORAGE (Thousand Ac. Ft.)

Reservoir	Usable Capacity	This Year	Last Year	Ave.
<hr/>				
- No Reservoirs -				

## WIND RIVER BASIN

**MOUNTAIN SNOWPACK\***



\*Based on selected stations

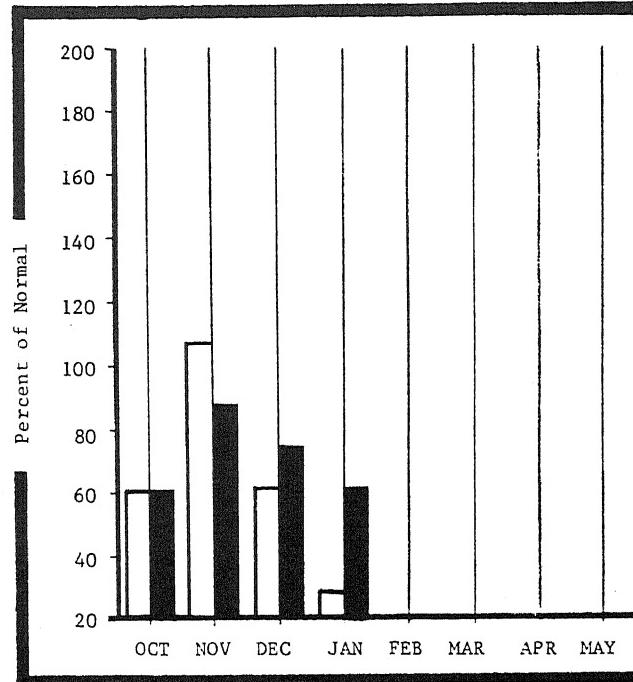
Maximum    [stippled bar]

Average    [diagonal line bar]

Minimum    [stippled bar]

Current    [solid line with dot]

**PRECIPITATION\***



\*Based on selected stations



Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

A 30 percent loss of snowpack compared to average figures was the result of the cold and dry month of January. The basin snowpack is now at 32 percent below normal and will, with normal conditions from here on, produce streamflows about 10 to 15 percent below normal.

## WIND RIVER BASIN

## STREAMFLOW FORECASTS

(1) Observed flow plus change in storage in Bull Lake, Pilot Butte Reservoir and diversion to Wyoming canal.  
 (2) Observed flow plus change in storage in Bull Lake, Pilot Butte Reservoir, and Boysen Reservoir; plus diversion to Wyoming canal.  
 (3) Observed flow plus change in storage in Bull Lake.  
 \*\* Measured flows for last year are U.S.G.S. provisional figures, subject to revision.  
 + Period of average 1961-1980.

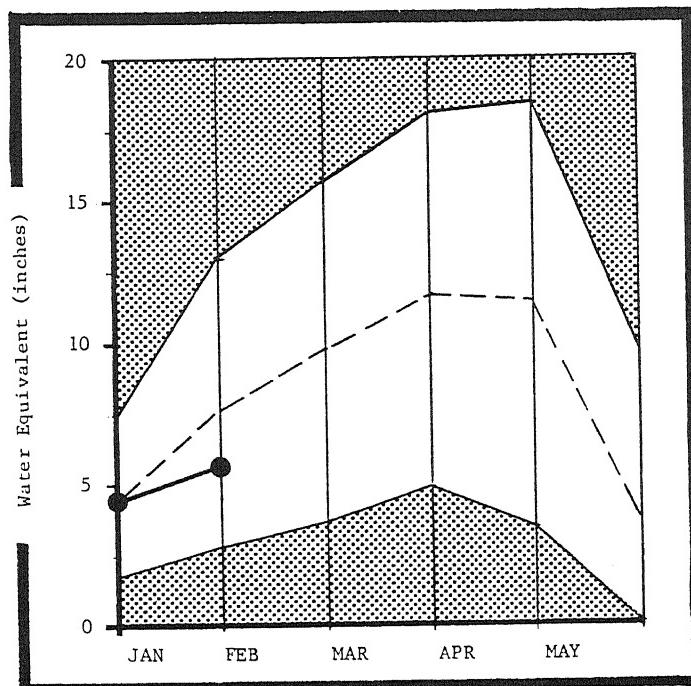
## SUMMARY OF SNOW MEASUREMENTS

RESERVOIR STORAGE (Thousand Ac. Ft.)

River Basin and/or Sub-Watershed	No.	This Yr.	Snow Snow/Water as Pct of Site/Last Yr/Average	Reservoir	Usable Capacity	Usable Storage This   Last Year   Year   Ave.
Upper Wind River	9	78	67	Bull Lake	151.81	89.71   106.61   93.31
Pogo Agie	4	61	75	Pilot Butte	31.61	23.71   19.31   14.71
Wind River above Boysen	12	73	66	Boysen	549.91	351.81   361.21   348.01

## BIGHORN RIVER BASIN

MOUNTAIN SNOWPACK\*



\*Based on selected stations

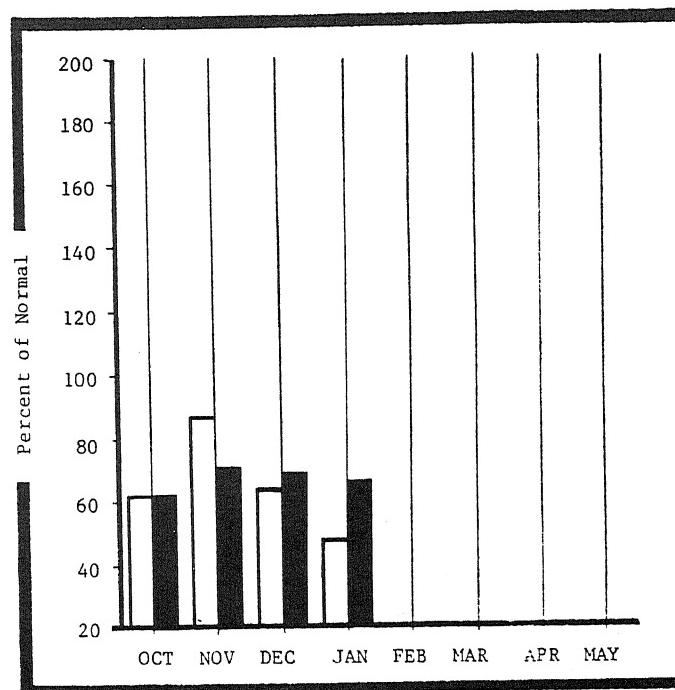
Maximum [Hatched Bar]

Average [Dashed Line]

Minimum [Solid Bar]

Current [Solid Line with Dot]

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation

Year to date precipitation

### WATER SUPPLY OUTLOOK:

Twenty-four percent below normal snowpacks were measured in this basin, except for Owl Creek drainage at 44 percent below normal. Another below normal snowmelt season is expected with forecasts ranging from 15 to 22 percent below normal. Reservoir storage is in very good shape, however.

## BIGHORN RIVER BASIN

### STREAMFLOW FORECASTS

STREAMFLOW FORECAST POINT	THIS YEAR		Streamflow Forecast	PAST RECORD	
	11,000 Ac-Ft.	1 Pct. Ave.		Period	Last Yr.** Average +
WIND RIVER below Boysen Reservoir (1)	1,030	89	April-Sept.	1,163	
TENSLEEP CREEK near Tensleep	71.5	81	April-Sept.	(Disc.)	
MEDICINE LODGE CREEK near Hyattville	18.7	80	April-Sept.	(Disc.)	
SHELL CREEK near Shell	63.2	81	April-Sept.	78.0	
GREYBULL RIVER at Meeteetse	183	85	April-Sept.	215	
SHOSHONE RIVER below Buffalo Bill Dam (2)	720	85	April-Sept.	845	
CLARK FORK near Belfry	520	83	April-Sept.	628	
SOUTH FORK SHOSHONE RIVER near Valley	230	83	April-Sept.	278	
NOWOOD RIVER near Tensleep	60.0	84	March-Sept.	71*	

(1) Observed flow plus change in storage in Bull Lake, Pilot Butte, and Boysen Reservoir; plus diversion to Wyoming Canal.

(2) Observed flow plus change in storage in Buffalo Bill Reservoir and diversion to Hart Mountain Canal.

\* Less than 20 year average.

\*\* Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

+ Period of average 1961-1980.

### SUMMARY of SNOW MEASUREMENTS

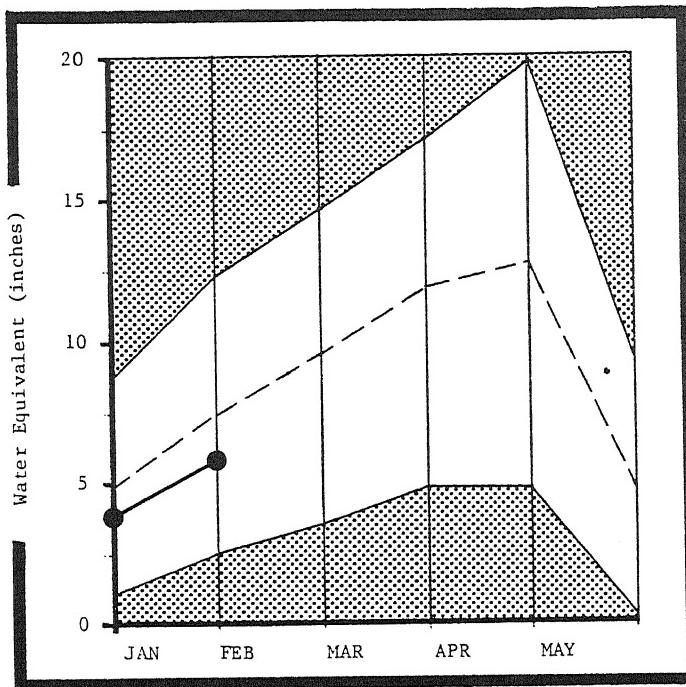
River Basin and/or Sub-Watershed	No. of Sites	This Yr. Snow Water as Pct of Last Yr	Average
WYOMING	9	91	70
.	4	103	83
.	5	101	77
.	4	88	76
Basin(Boysen-Bighorn)	21	92	75

### RESERVOIR STORAGE (Thousand Ac. Ft.)

Reservoir	Usable Capacity	This Year	Last Year	Ave.
Boysen	549.91	351.81	361.21	348.01
Buffalo Bill	373.11	255.81	272.11	188.61
Bighorn Lake	613.71	907.41	377.31	792.51

## POWDER AND TONGUE RIVER BASINS

MOUNTAIN SNOWPACK\*



\*Based on selected stations

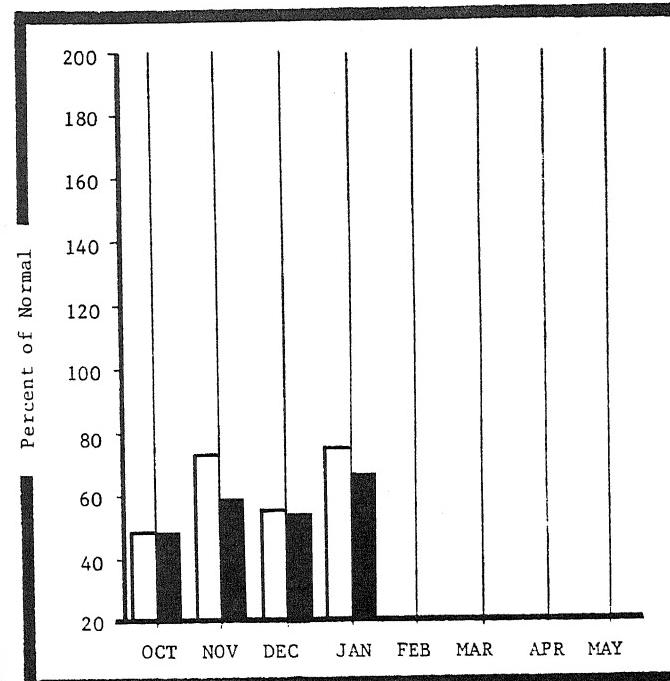
Maximum

Average

Minimum

Current

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation



Year to date precipitation

### WATER SUPPLY OUTLOOK:

The 17 percent below normal snowpacks in this region are expected to yield snowmelt streamflows at about 15 percent below usual. Normal streamflows are still possible, however, as this basin usually receives another 43 percent of its snow in the remaining snow season.

## POWDER AND TONGUE RIVER BASIN

## STREAMFLOW FORECASTS

STREAMFLOW FORECAST POINT	THIS YEAR		Streamflow Forecast	PAST RECORD	
	Forecast	11,000 Ac-Ft.		Period	Last Yr.,xx
TONGUE RIVER near Dayton (1)	105	85	April-Sept.		123
MIDDLE FORK POWDER RIVER near Barnum	18.8	87	April-Sept.		21.2
NORTH FORK POWDER RIVER near Hazelton	9.0	85	April-Sept.		10.6
CLEAR CREEK near Buffalo	35.1	87	April-Sept.		40.0
ROCK CREEK near Buffalo	22.1	87	April-Sept.		25.4
PINEY CREEK at Kearny	47.2	86	April-Sept.		54.8
LITTLE BIGHORN at Hardin, MT	161	88	April-Sept.		182

(1) Observed flow plus diversion to Highline Ditch.  
Flow for last year are U.S.G.S. provision.

(1) Observed flow plus diversion to Highline Ditch.  
Values for last year are U.S.G.S. provisional figures, subject to revision.

xx Measured flows for last year  
 + Period of average 1961-1980.

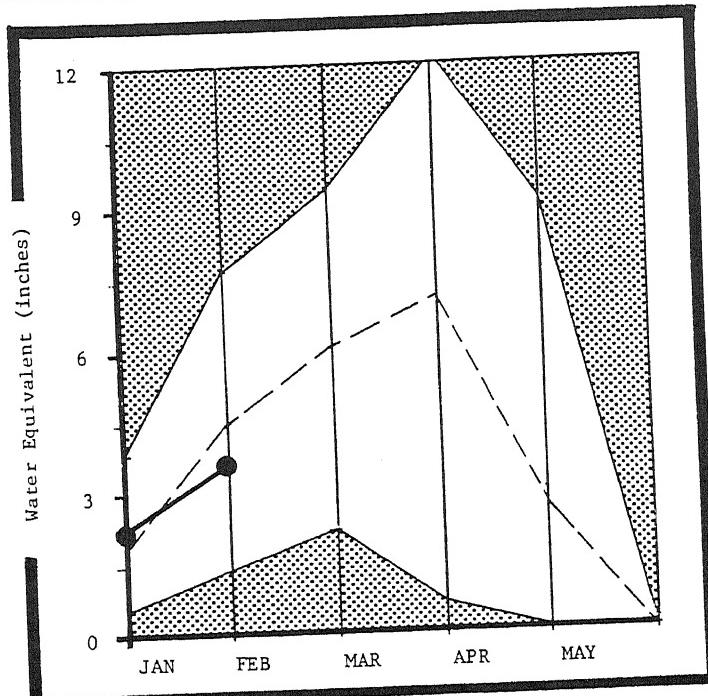
## SUMMARY of SNOW MEASUREMENTS

River Basin and/or Sub-Watershed	No. 1 This Yr.	Snow 1 Snow/Water as Pct of Site	Last Yr.	Average
Tongue River	15	92	82	
Goose Creek	5	89	81	
Clear Creek	2	95	81	
Crazy Woman Creek	3	100	72	
Powder River Basin	10	90	83	

**RESERVOIR STORAGE (Thousand Ac. Ft.)**

## BELLE FOURCHE AND CHEYENNE RIVER BASINS

MOUNTAIN SNOWPACK\*



\*Based on selected stations

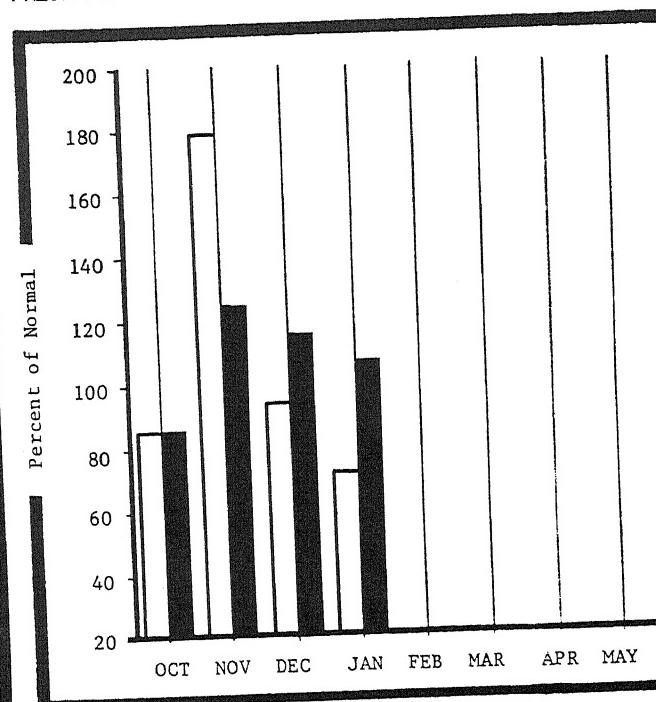
Maximum [Shaded]

Average [Dashed]

Minimum [Shaded]

Current [Solid Line]

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation [White Box] Year to date precipitation [Black Box]

### WATER SUPPLY OUTLOOK:

Prospects for good dry January. Current streamflows at above storage is all above (below) and Angostura

## BELLE FOURCHE & CHEYENNE RIVER WATERSHED

## TREAMEFLOW FORECASTS

## SUMMARY OF SNOW MEASUREMENTS

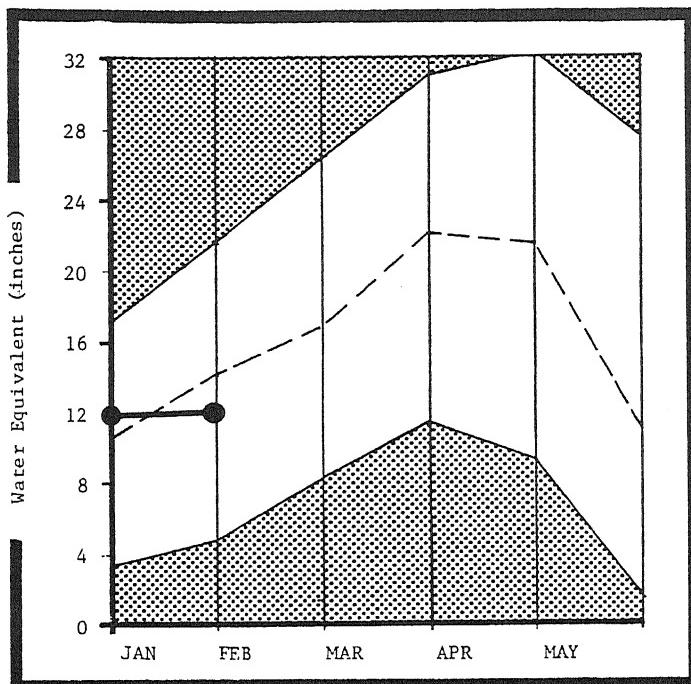
River Basin and/or Sub-Watershed	No.   This Yr.   Snow   Snow/Water as Pct of   Site   Last Yr   Average
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**RESERVOIR STORAGE (Thousands Ac. Ft.)**

Reservoir	Usable	Usable	Storage	
	Capacity	This	Last	
	Year	Year	Ave.	
Keyhole	190.41	71.41	43.31	117.01
Belle Fourche	185.21	125.61	114.71	112.91
Angostura	86.21	52.01	58.61	60.91
Deerfield	15.11	15.21	9.21	13.71
Pactola	55.01	53.81	53.41	49.81
Shadehill	81.51	51.41	57.71	48.31

## UPPER NORTH PLATTE AND LITTLE SNAKE RIVER BASINS

MOUNTAIN SNOWPACK\*



\*Based on selected stations

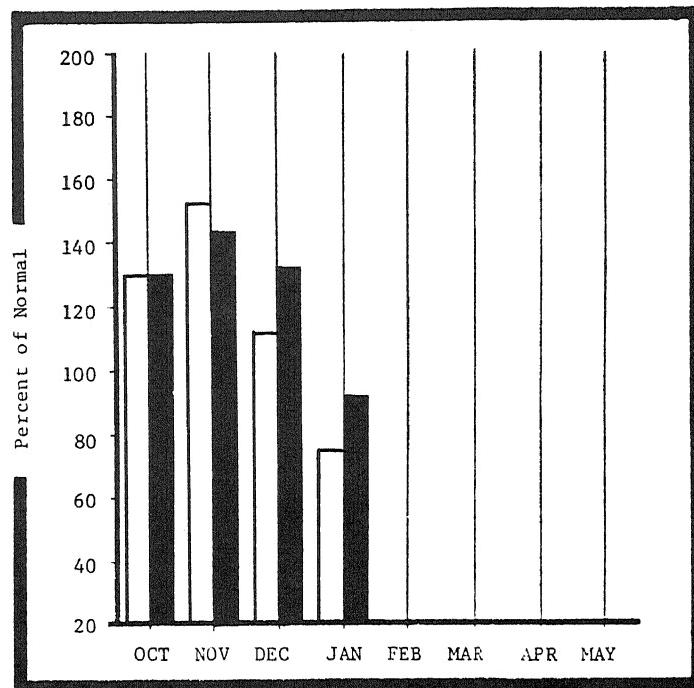
Maximum [Shaded Box]

Average [Dashed Line]

Minimum [Shaded Box]

Current [Solid Line with Circle]

PRECIPITATION\*



\*Based on selected stations

Monthly precipitation [White Box]

Year to date precipitation [Black Box]

### WATER SUPPLY OUTLOOK:

Seminoe Reservoir is storing 89 percent above usual and Pathfinder is a close second high at 65 percent above. This, combined with continued above normal (36 percent) winter streamflow into Seminoe, promises a very good water supply for the coming summer without considering the snowpacks.

The snowpack water supply, however, has been suppressed some by the dry and windy January. The 5 percent below snowpack should yield streamflows that are near normal.

## UPPER NORTH PLATTE RIVER AND LITTLE SNAKE RIVER BASINS

## TREAMFLOW FORECASTS

(1) Observed flow plus transbasin diversion.

\*\* Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

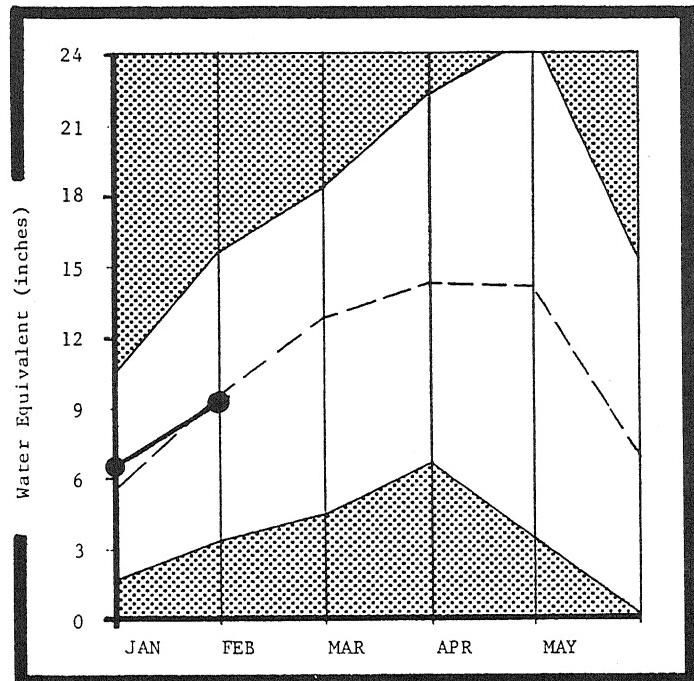
+ Period of average 1961-1980.

## SUMMARY of SNOW MEASUREMENTS

RESERVOIR STORAGE (Thousand Ac. Ft.)

## LOWER NORTH PLATTE, SWEETWATER, AND LARAMIE RIVER BASINS

MOUNTAIN SNOWPACK\*



\*Based on selected stations

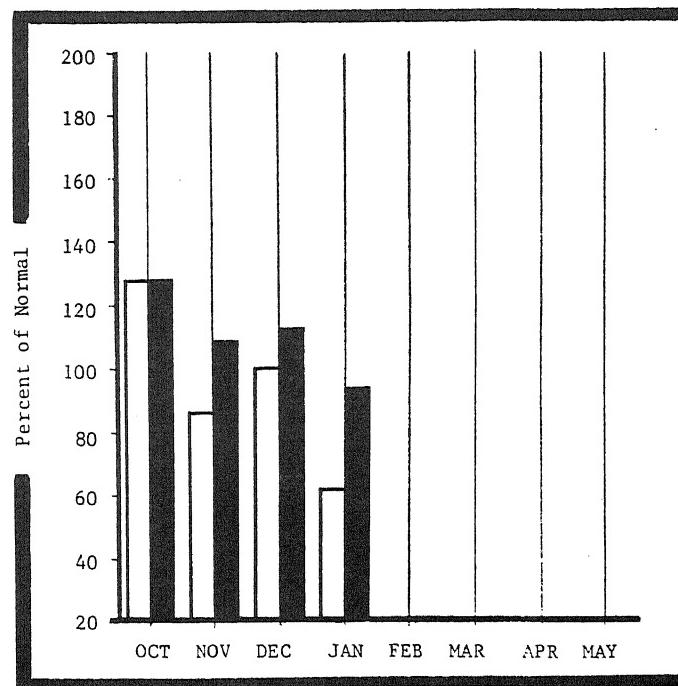
Maximum [Hatched Bar]

Average [Dashed Line]

Minimum [Hatched Bar]

Current [Solid Line with Circle]

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation [White Bar]



Year to date precipitation [Black Bar]

### WATER SUPPLY OUTLOOK:

Streamflow forecasts are all for below normal (5-15 percent). The snowpacks are from 4 percent to 33 percent below normal in the Sweetwater with month's dryness and extreme winds. Reservoirs are excellent, however.

## LOWER NORTH PLATTE RIVER WATERSHED

### STREAMFLOW FORECASTS

STREAMFLOW FORECAST POINT	THIS YEAR		Streamflow Forecast	Period	PAST RECORD	
	1,000 Ac-Ft.	Pct. Ave.			1,000 Acre-Feet	Last Yr.**
NORTH PLATTE RIVER near Sinclair	674	95	April-Sept.			710
SWEETWATER RIVER near Alcova	59.0	80	April-Sept.			73.7
DEER CREEK at Glenrock	37.4	85	March-July			43.9
LaPRELE CREEK above Reservoir near Douglas	24.5	87	April-July			28.2
LARAMIE RIVER & PIONEER CANAL near Woods	125	95	April-Sept.			132
LITTLE LARAMIE RIVER near Filmore	58.0	89	April-Sept.			65.1

(1) Observed flow plus transbasin diversions from North Platte River Basin to Cache La Poudre River Basin in Colorado.

xx Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

+ Period of average 1961-1980.

### SUMMARY of SNOW MEASUREMENTS

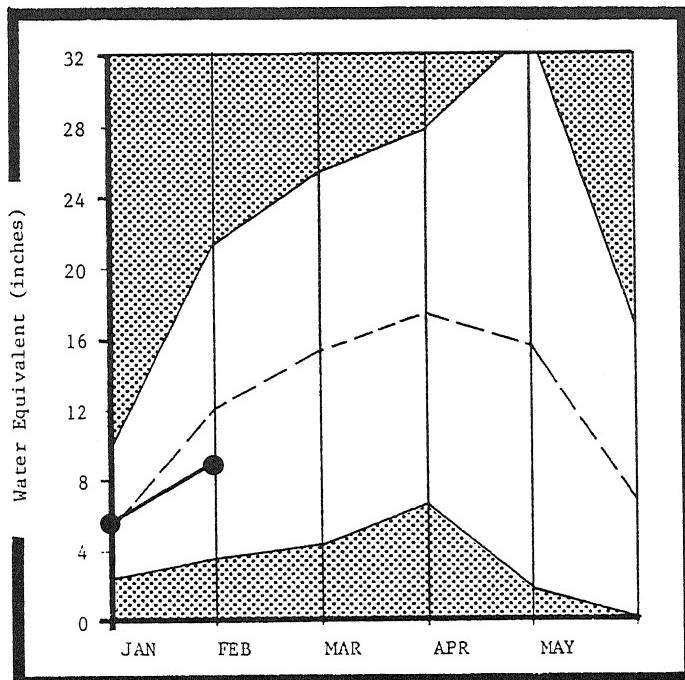
River Basin and/or Sub-Watershed	No.	This Yr.	Snow Water as Pct of Last Yr	Average
Ele Creeks	3	73	67	
by, Laramie River	2	72	88	
mie River	15	71	91	
iver	4	69	77	
otal	7	69	96	
r in Wyoming	15	67	85	
	55	71	90	

### RESERVOIR STORAGE (Thousand Ac. Ft.)

Reservoir	Usable Capacity	This Year	Last Year	Ave.
Seminole	1,017.31	851.81	786.81	451.61
Pathfinder	1,015.51	894.31	920.91	540.81
Alcova	30.71	3.51	--	--
Glendo	783.71	340.31	416.71	333.11
Guernsey	45.21	1.31	1.61	7.21
Wheatland #2	98.91	71.41	70.31	47.11
PROJECT WATER				
North Platte Project	1,016.11	1012.51	1090.01	--
Kendrick Project	1,201.61	1003.71	1012.11	--
Glendo Project Users	454.31	118.11	51.11	--

## UPPER GREEN RIVER BASIN

MOUNTAIN SNOWPACK\*



\*Based on selected stations

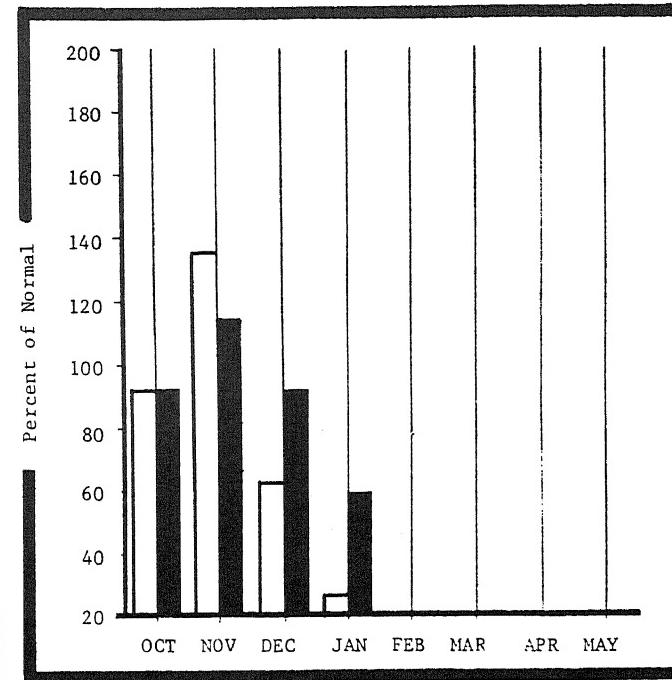
Maximum [stippled bar]

Average [dashed line]

Minimum [stippled bar]

Current [solid line with dots]

PRECIPITATION\*



\*Based on selected stations

[white bar]

Monthly precipitation

[black bar] Year to date precipitation

### WATER SUPPLY OUTLOOK:

A sparse one-fourth of the usual snow/precipitation was received during January. Snowpacks are now near 30 percent below normal. Eleven to 16 percent below normal streamflows are expected. With 33 percent of the usual snow season remaining, above normal weather could overcome expected shortages.

## UPPER GREEN RIVER BASIN

## STREAMFLOW FORECASTS

STREAMFLOW FORECAST POINT	THIS YEAR		Streamflow Forecast 1,000 Ac-Ft. 1 Pct. Ave.	PAST RECORD			
	Forecast			Forecast Period	1,000 Acre-Feet		
	11,000 Ac-Ft.   Last Yr.   Average +				Last Yr.   Average +		
GREEN RIVER at Warren Bridge	290	89	April-Sept.		326		
FONTENELLE Reservoir Inflow	800	92	April-Sept.		--		
LaBARGE CREEK at LaBarge Meadows	7.5	84	April-Sept.		8.9		
BIG SANDY near Big Sandy	50.0	82	April-Sept.		61.1		

\*\* Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

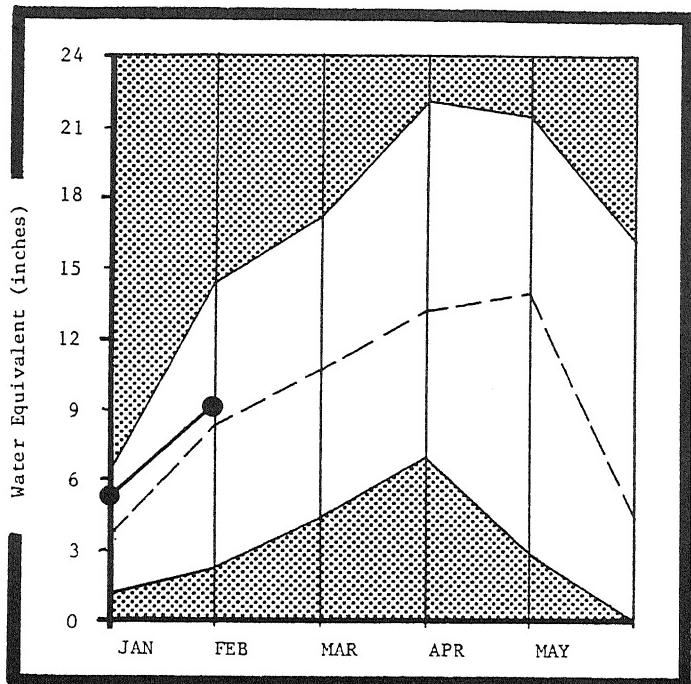
+ Period of average 1961-1980.

## SUMMARY of SNOW MEASUREMENTS

RESERVOIR STORAGE (Thousand Ac. Ft.)

## LOWER GREEN RIVER BASIN

MOUNTAIN SNOWPACK\*



\*Based on selected stations

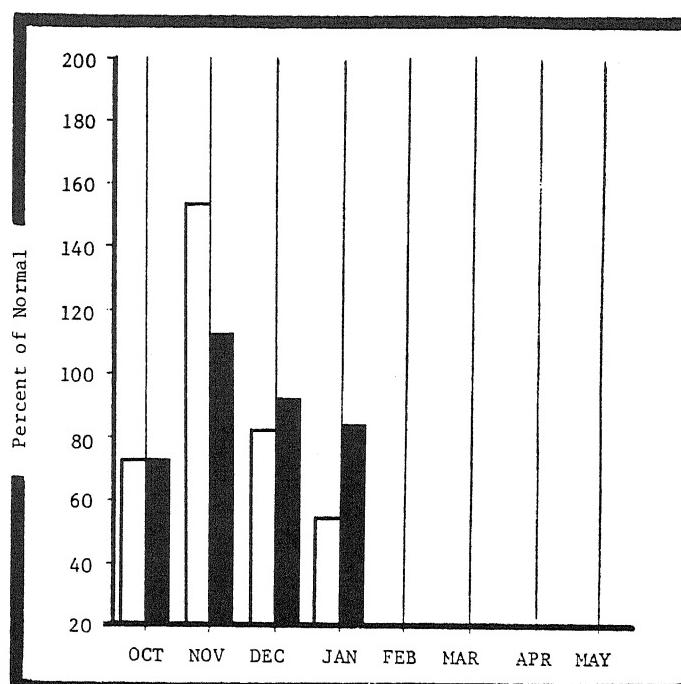
Maximum 

Average 

Minimum 

Current 

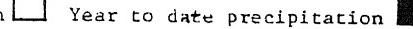
PRECIPITATION\*



\*Based on selected stations



Monthly precipitation



Year to date precipitation

### WATER SUPPLY OUTLOOK:

A 29 percent of average decrease in snowpack was noted during the dry January. Henry's Fork is still one of the few above normal forecasts around the state with 18 percent above normal streamflow expected. The Hams Fork is expected to yield 17 percent below normal flows.

Reservoir storage is good.

## LOWER GREEN RIVER BASIN

## STREAMFLOW FORECASTS

STREAMFLOW FORECAST POINT	THIS YEAR		Streamflow	PAST RECORD	
	Forecast		Forecast	1,000 Acre-Feet	
	11,000 Ac-Ft.	1 Pct. Ave.	Period	Last Yr.***	Average +
FONTENELLE Reservoir Inflow . . . . .	800	92	April-Sept.		--
HAMS FORK below Pole Creek, near Frontier .	59.0	83	April-Sept.		71.3
GREEN RIVER near Green River (1) . . . . .	900	83	April-Sept.		1079
BLACK FORK RIVER near Milburne . . . . .	102	114	April-July		89.9
HENRY'S FORK RIVER near Linwood, UT . . . .	57	118	April-Sept.		48.0
FLAMING GORGE Inflow (1) . . . . . . .	1,300	104	April-Sept.		1,248

(1) Observed flow plus change in storage in Fontenelle Reservoir.

\*\* Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

+ Period of average 1961-1980.

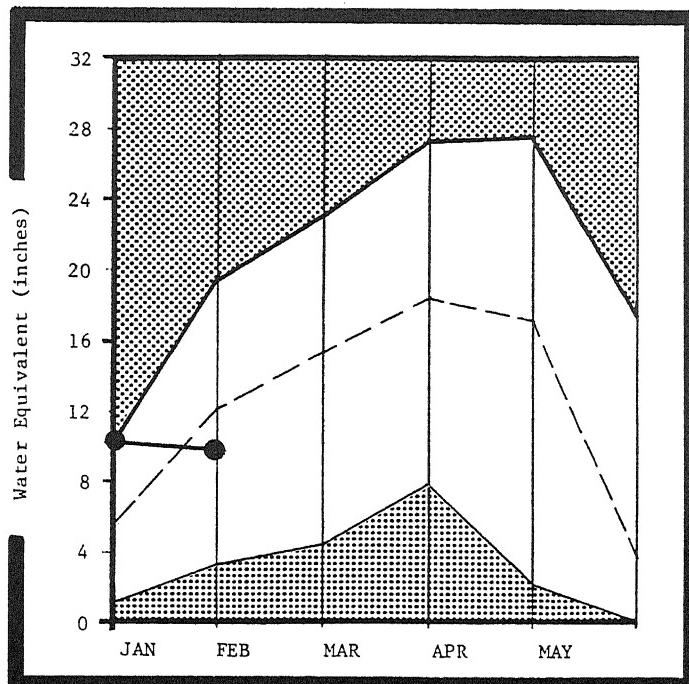
## SUMMARY OF SNOW MEASUREMENTS

RESERVOIR STORAGE (Thousand Ac. Ft.)

River Basin and/or Sub-Watershed	No.	This Yr.	Snow Water as Pct of SiteLast Yr	Average	Reservoir	Usable Capacity	Usable Storage This Year	Last Year	Ave.
Hams Fork	3	70	71		Flaming Gorge	3,749.01	3190.51	3309.81	--
Blacks Fork	4	69	100		Viva Naughton	36.01	33.01	7.71	--
Henry's Fork	1	55	72						
Green River above Flaming G.	15	83	72						

## UPPER BEAR RIVER BASIN

MOUNTAIN SNOWPACK\*



\*Based on selected stations

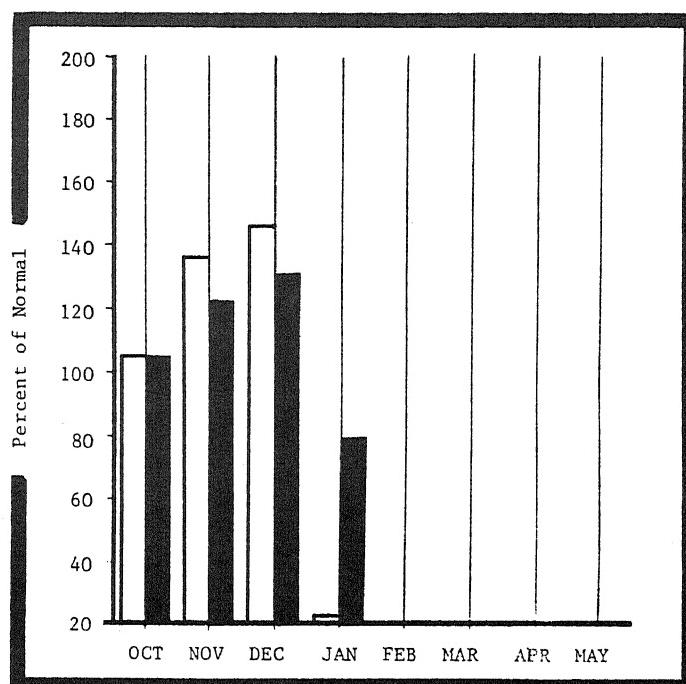
Maximum [Hatched]

Average [Dashed]

Minimum [Solid Black]

Current [Solid Line with Circle]

PRECIPITATION\*



\*Based on selected stations



Monthly precipitation [White Box] Year to date precipitation [Black Box]

### WATER SUPPLY OUTLOOK:

The forecasted 28 percent above normal flow for the Bear River near Woodruff is the highest in the state. Smiths and Thomas Fork will, however, flow at 16 and 20 percent below normal respectively. The snowpack in this basin is a little below normal.

## **BEAR RIVER BASIN**

## STREAMFLOW FORECASTS

xx Measured flows for last year are U.S.G.S. provisional figures, subject to revision.

+ Period of average 1961-1980.

#### SUMMARY OF SNOW MEASUREMENTS

**RESERVOIR STORAGE (Thousands Ac. Ft.)**

River Basin and/or Sub-Watershed	No.	This Yr.	Snow Snow/Water as Pct of Site	Usable Capacity	This Year	Last Year	Usable Storage Ave.
			Last Yr/Average				
Upper Bear River	3	88	98	55.81	55.51	52.61	--
Smith & Thomas Forks	4	70	74				
Bear River Total	10	77	85				

THE FOLLOWING ORGANIZATIONS COOPERATE  
WITH THE SOIL CONSERVATION SERVICE  
IN SNOW SURVEY WORK

State

Conservation Districts of Wyoming  
State Engineer of Wyoming  
Department of Water Resources of Nebraska  
Irrigation Districts of Wyoming  
University of Wyoming  
    Department of Atmospheric Resources  
    Department of Agricultural Engineering

Federal

U.S. Department of Agriculture  
    Soil Conservation Service  
    Forest Service

U.S. Department of Commerce  
    NOAA, National Weather Service

U.S. Department of Interior  
    Bureau of Reclamation  
    Geological Survey  
    National Park Service  
    Bureau of Indian Affairs  
    Bureau of Land Management

Private

Utah Power and Light Company  
Eden Valley Irrigation District

Other organizations and individuals furnish information for the  
snow survey reports. Their cooperation is gratefully acknowledged.